

**Before the
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554**

In the Matter of:)	
)	
Public Notice on 855 Toll Free Code)	CC Docket No. 95-155
Opening Allocation)	DA 10-1604
)	
Toll Free Number Coalition)	CC Docket No. 95-155
Petition for Emergency Relief and Expedited Action)	DA 10-1117
)	
)	

**REPLY COMMENTS OF SMS/800, INC. AND DATABASE SERVICES MANAGEMENT, INC.
ON PUBLIC NOTICE AND RESPONSE TO
THE TOLL FREE NUMBER COALITION'S
PETITION FOR EMERGENCY RELIEF AND EXPEDITED ACTION**

SMS/800, Inc. and Database Services Management, Inc. hereby jointly respond to the comments filed in response to the Public Notice, DA 10-1604, which had requested comments on the possibility of requiring an "allocation scheme or rationing of new 855 toll free numbers" in connection with the opening of the 855 Toll Free code. These Comments also respond to the Toll Free Number Coalition's Petition for Emergency Relief and Expedited Action in the above captioned proceeding. We address the following areas:

- 1) The feasibility of implementing various allocation schemes by the currently planned code opening date of October 2, 2010 and issues that may need to be addressed for several of the allocation mechanisms proposed by commenters, should the Commission decide to pursue them; and,
- 2) Preparation for the 855 code opening, including SMS/800 system changes since the previous code opening that will impact the 855 code opening, a description of the testing performed in preparation for the code opening, and a correction of the record with regard to technical issues surrounding previous code openings and forms of SMS/800 access.

Feasibility of Allocation Schemes

To the extent the FCC determines that an allocation scheme or rationing of new 855 toll free numbers is needed, the only mechanisms SMS/800, Inc. can assure will be in place on October 2, 2010 are those that have been designed and tested. Those options are:

- 1) Allocation based on the relative size of the various Resp Orgs;

- 2) Allocation based on a flat rate across all Resp Orgs:
- 3) Allocation based on a combination of (1) and (2) above; or,
- 4) Allocation based on table values defined by the Commission.¹

Although this plan was developed for allocating the existing Service Area Codes (800, 888, 877, and 866), the code is being modified to accommodate allocation of the new 855 toll free numbers to ensure that the system would be ready by October 2, 2010 if the Commission mandates SMS/800, Inc. to implement such an allocation or rationing scheme, using one of the existing allocation options listed above.

In the Public Notice, the Commission states that it “does not intend to delay the October 2nd 855 toll free code opening”. Several other proposals could not be implemented within that timeframe.

- 1) Toll Free Numbers.Com suggests that rationing should be implemented by Resp Org *administrator*, not by Resp Org. This capability is not in the allocation scheme currently implemented. Implementing rationing by Resp Org administrator would require software changes and DSMI and SMS/800, Inc. could not ensure that such an allocation could be implemented in a fair, orderly and non-discriminatory manner by the code opening date of October 2, 2010.
- 2) In their comments filed in this proceeding, Vanity International proposes the use of an offline allocation process called “Randomized Round Robin” rather than a rationing approach. As described, this capability is not within the allocation scheme currently implemented. Implementing this allocation process would require feedback from the industry, the development or purchase of a randomization tool, testing of this tool to ensure performance for this task and then software changes to the SMS/800 system to incorporate all offline results. It is highly unlikely that these activities could be completed by the code opening date of October 2, 2010.
- 3) In the alternative that the stay requested in their Petition is not granted, the Coalition requests that the code opening take place, but that the Commission direct all Resp Orgs to not assign the toll free numbers reserved for 30-60 days to ensure the process was fair and if it is not, for DSMI to recover all toll free numbers and institute a new deployment that is fair and equitable. First, this is not possible without software changes to the SMS/800 system. Second, this would have an impact on the current limitations on the quantity of toll free numbers each Resp Org can have in reserve status. These limits have been identified by the Commission and thus the Commission would need to mandate how to change these limits for this period. Third, the Coalition proposes no methods to assess the fairness of the results and DSMI and SMS/800, Inc. believe it is unlikely that a method of determining fairness could be prepared and vetted by the industry prior to the October 2, 2010 code opening.

¹ See Comments of DSMI, page 3, filed in this proceeding Sept. 3, 2010.

- 4) The Coalition “urges the Commission to reinstate the right of first refusal early reservation plan of the SNAC, previously used in the 888 service code release.” The right of first refusal plan for the 888 code opening had only to address one existing Service Area Code (i.e., 800), i.e., one Resp Org and one subscriber to ask. Any attempt to implement a right of first refusal plan for the 855 code opening would require addressing the possibility that up to four different Resp Orgs and end users have that right. Sorting out who has the right of first refusal would clearly be a lengthy and involved process with a significant amount of industry participation, and perhaps subscriber feedback, being considered. Given the likely length of that process, it does not seem possible that a right of first refusal plan could be implemented by October 2, 2010.

The Commission requires that reservations of toll free numbers be made on a first-come, first-served basis unless the Commission directs otherwise.² However, it is not clear that all (or perhaps any) allocation mechanism would conform to this principle. Thus, to the extent that the Commission mandates SMS/800, Inc. to implement an allocation scheme, DSMI and SMS/800, Inc. request that the FCC affirmatively order the allocation scheme and specifically waive any contrary requirements such as the first-come, first-served principles.

Preparation for the 855 Code Opening

The Coalition’s comments and reasons enumerated in their Petition regarding technical issues with previous code openings do not accurately represent what occurred in connection with previous code opening and fail to take account of substantial upgrades to SMS/800 service in the intervening years. The Coalition’s characterization of the system freezing within minutes of the start of the 866 code opening and a 25-40 minute lockout (page 4 of Petition) for example, is not correct. In fact, a review of this issue after the 866 code opening showed that the SMS/800 system did not freeze. The 3270 and WBA interfaces are synchronous interfaces which require a response from the SMS/800 system before it will allow a new request to be sent. Resp Orgs that chose to use the 3270 and WBA interfaces to connect to the system during the 866 code opening experienced delays in receiving responses from the SMS/800 due to the unusually large traffic load placed on the system. The system did not freeze but was waiting for a response which was longer than usual given the unusually high system load during the code opening.

The Coalition claims (page 2 of the Petition) that emergency relief is warranted given “DSMI’s continued failure to rectify flaws in its administration of previous toll free service code releases which have prevented many small RespOrgs, toll free number service providers and their customers from reserving numbers vital to their businesses.” Several responses to this claim (and other similar claims made in the Petition) are noteworthy.

First, this claim, and others of the Coalition’s comments regarding past code opening concerns are outdated as the SMS/800 system has been enhanced and upgraded many times during the decade since the last code opening.

² 47 C.F.R. §52.111

The following system changes made in the decade since the 866 code opening are designed to improve the system's performance during the 855 code opening:

- 1) 3270 users can submit a single search and reserve transaction (previously they submitted a search and then a reservation, two separate transactions);
- 2) 3270, MGI and WBA share the same message queue with six (6) processors supporting concurrent execution to support first-come, first-served across all interfaces (previously there were only two (2) processors);
- 3) All reservation transactions occur within the same system component avoiding backups on internal system links (previously the transactions had to be transmitted from one system to another, slowing down the process); and,
- 4) For the synchronous response interfaces, 3270 and WBA, the system response time is shortened by sending a response acknowledgment rather than waiting for the reservation to be committed to the database.

Further, in preparation for the 855 code opening, SMS/800, Inc. and DSMI have performed a robust set of volume and functionality testing including: 1) Testing with the Service Control Point Owners/Operators; 2) Network call-through testing by Service Providers; 3) Individual testing by Resp Orgs; 4) Group testing with an additional simulated load generated by SMS/800; 5) Product and regression testing; 6) Acceptance testing of all software changes required; and, 7) Performance and stress testing. Over more than five months, several rounds of progressive testing with various configurations and system loads have been performed, and DSMI and SMS/800, Inc. have supported the implementation of several changes to the system that are designed to improve performance during the 855 code opening, including: 1) logon transactions made parallel running in five concurrent regions; 2) dedicated buffers added; 3) buffer sizes increased; 4) number of concurrent WBA users allowed on SMS/800 was tripled (from 1,500 to 4,500); 5) MGI buffer management system implemented; and 6) increased WBA timeout clock from 300 seconds to 1200 seconds. DSMI and SMS/800, Inc. contend that these changes will improve the SMS/800 user experience during the 855 code opening. SMS/800 continues to conduct internal performance testing and allow Resp Orgs to perform individual testing.

Second, any code opening is an unusual event, with unusual system demands. One cannot judge performance of the system, nor any measure of access to the system against normal reservation days (i.e., against non code opening days) or even the 11pm hour when sparring occurs and there is often a spike in traffic. DSMI and SMS/800, Inc. have taken actions to best ensure that the code opening will result in a fair, orderly and non-discriminatory manner of toll-free number administration. Third, Resp Orgs choose their form of access to the SMS/800 system. To the extent that any particular Resp Org believes that a particular form of access is not equal, it is free to choose another form of access.

The Coalition states (page 6 of the Petition) that in a recent “855 Code Opening Guest Performance Testing Session administered by SMS/800, in contrast to larger RespOrgs using an MGI interface, who experienced no delays or lag time, smaller Resp Orgs using 3270 terminals, seeking to process far fewer transactions waited nearly 20 minutes to get a response from the system, and the browsing session of users of the GUI interface were similarly idled and then disconnected after 6 minutes.” This may be correct. However, this particular test was performed in a test environment with only 421 MIPS, as opposed to the production environment which has 1264 MIPS. Further, more recent tests within the production environment have indicated much better response times for 3270 and WBA users.

In its Petition the Coalition requests a declaratory ruling by September 30, 2010 to defer the 855 code opening until DSMI demonstrates that the allocation will be administered in a fair, orderly and non-discriminatory manner. However, the Coalition offers no specific metrics by which DSMI could be measured. SMS/800, Inc. and DSMI contend that all reasonable actions are being taken to ensure that the 855 code opening will in fact be administered in a fair, orderly, and non-discriminatory manner.

In their filed comments, Vanity International and the Coalition state or imply that different forms of access to the SMS/800 system are not equal or neutral.³ However, neither, SMS/800, Inc. nor DSMI dictates the type of access that any Resp Org must use. There are three forms of connectivity offered via the 800 Service Management System (SMS/800) Functions Tariff F.C.C. No. 1 (“Tariff”), and Resp Orgs are able to select which form(s) of access best suit(s) their needs. Further, there are commercially available options of access that would allow Resp Orgs access to the system via a Mechanized Generic Interface.

Roles and Responsibilities

The Coalition’s Petition confuses the roles and responsibilities of various entities involved in providing SMS/800 services. Access to the SMS/800 database is provided by the Bell Operating Companies (“BOCs”) via the Tariff. The BOCs established SMS/800, Inc., a non-profit District of Columbia corporation, to administer the SMS/800 Services on their behalf. SMS/800, Inc. manages and oversees the SMS/800 services while DSMI is contracted by SMS/800, Inc. to perform the daily business management of SMS/800 services. Additionally, DSMI is the entity designated as the Toll Free Number Administrator by the FCC.

³ See, e.g., Comments by Vanity International, “Toll-Free 855 allocations by Randomized Round Robin”. (“The fact is that RespOrg (sic) do not have ‘equal access’ speeds, so there is no dynamic way to ensure ‘equal access’ to 855 toll free numbers.” At pg 1)


Conclusion

DSMI and SMS/800, Inc. urge the FCC to consider our reply comments as it examines the next steps in the 855 code opening.

Respectfully submitted,

SMS/800, Inc.

By:

 (smw)

Maureen Callan
President
SMS/800, Inc.
P.O. Box 8122
Bridgewater, NJ 08807
(732) 699-2400
maureen.callan@sms800inc.com

DSMI

By:



Michael Wade
President
DSMI
One Telcordia Drive
Piscataway, NJ 08854
(732) 699-3420
mwade@telcordia.com